4 years, actuarial survival rate was 77%, primary patency was 80% but secondary patency was 95%. Primary patency was adversely affected by an axillofemoral revascularization (HR = 3.5, $p = 0.01$), and ESRD (HR = 10.6, $p = 0.03$). Diabetes (HR = 12.7, $p = 0.04$) and tissue loss (HR = 13.7, $p = 0.01$) were predictors of limb loss.

Conclusions: Surgery for AIOD is currently performed for failed endovascular therapy or advanced aortoiliac occlusion. Despite more challenging anatomy outcomes remain durable and comparable to historical series. Maintenance of proficiency in this surgical reconstruction is essential.

Patient Characteristics

Patient characteristics	*All patients (n = 205)*	*Aortofemoral Bypass (n = 142)*	*Axillofemoral Bypass (n = 63)*	p-*value*
DM	25.4 (50)	26.4 (37)	22.8 (13)	0.60
Renal Insufficiency	8.4 (17)	3.6 (5)	19.3 (12)	<0.001
ESRD	2.5 (5)	0 (0)	8.1 (5)	0.002
Hypertension	62.1 (126)	59.3 (83)	68.2 (43)	0.22
High cholesterol	58.9 (119)	53.3 (83)	58.1 (36)	0.87
CAD	38.2 (78)	37.6 (53)	39.7 (25)	0.78
CHF	4.4 (9)	2.1 (3)	9.5 (6)	0.03
Prior MI	18.1 (37)	13.5 (19)	28.6 (18)	0.01
COPD	15.2 (31)	13.5 (19)	19.0 (12)	0.31
Smoking status				0.02
Never	16.2 (33)	13.4 (19)	22.6 (14)	
Former	37.2 (76)	33.8 (48)	45.2 (28)	
Current	46.6 (95	52.8 (75)	32.3 (20)	
Statin	57.1 (116)	60.3 (85)	50.0 (31)	0.17
ASA use	58.1 (118)	53.9 (76)	67.7 (42)	0.066

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PVSS5.

Frailty, Sarcopenia, and Mortality in Aortic Surgery Patients

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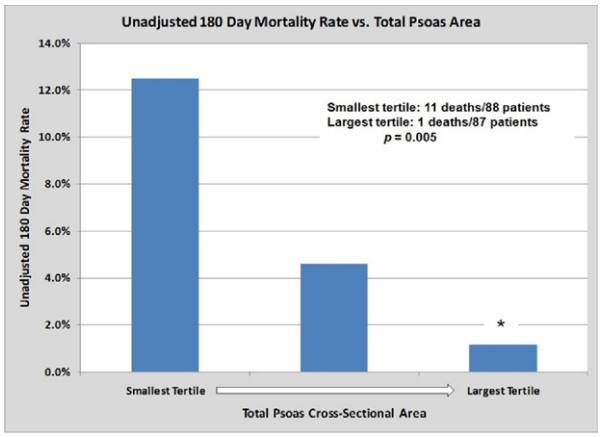
Objectives: Determining operative risk in patients undergoing aortic surgery is a difficult process, as multiple variables converge to impact overall mortality. Patient frailty is certainly a contributing factor, but is difficult to measure, with surgeons often relying on subjective or intuitive influences. We sought to utilize sarcopenia as an objective measure of frailty, and determine its utility as a predictor of survival following AAA repair.

Methods: 479 patients underwent elective open AAA repair between 2000 and 2008. 262 patients (54.7%) had preoperative CT scans available for analysis. Cross-sectional areas of the psoas muscles at the level of the L4 vertebra were measured. Postoperative survival and psoas area were analyzed using a univariable model.

Results: Mortality rates ranged from 1.9% (n = 5) at 30 days to 6.1% at 180 days (n = 16). At 60, 90, and 180 days postoperatively, the groups of patients who died had significantly smaller mean psoas areas. When stratified into tertiles of psoas area, the group of patients with the smallest psoas area (vs the largest psoas area group) had a higher mortality rate at 60 days (9.1% vs 1.1%, $p = 0.03$), 90 days (10.2% vs 1.1%, $p = 0.02$), and 180 days (12.5% vs 1.1%, $p = 0.005$). Figure 1 demonstrates the stepwise relationship between psoas area and mortality.

Conclusions: Central sarcopenia, an objective measure of frailty, correlates strongly with mortality following elective AAA repair. A better understanding of the role of frailty and sarcopenia may aid in risk stratification and impact timing of surgical repair, especially in more complex aortic operations.



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PVSS6.

Arterial Evaluation by Ultrasound for Dialysis Access

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Objectives: The rate of failure of access procedures is high and many of these are unanticipated. A more comprehensive arterial evauation can lead to changes in the planning for dialysis access. A simple schema for arterial study by ultrasound in presented.

Methods: 74 consecutive ultrasound exams were performed for 38 primary elective (51%) and 36 primary (49%) (with catheters) access cases with ages 28 to 87 including 40 females and 34 males. The Brachial arteries and bifurcations were completely interrogated for pulsatility, atheroma and anomalies. The Radial arteries were interrogated for atheroma, circumfrential stenosis, shadowing, diameter and wave-